

Remarks

This amendment is in response to the Office Action mailed on October 31, 2005. Claims 1, 12, and 22 are being amended. In view of the following remarks and above amendments, Applicant respectfully requests reconsideration and allowance of claims 1-22.

In the Office Action, all of the claims were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the phrase "at least two axially spaced outer race surfaces defining a lubrication groove therebetween" is considered unclear. Claims 1, 12, and 22 containing the offending phrase are being amended to more clearly claim the invention. Withdrawal of the rejection under 35 U.S.C. 112, second paragraph, is respectfully requested.

In the Office Action, claim 22 was rejected under 35 U.S.C. §102(b) as being anticipated by Peterson (U.S. Pat. No. 1,973,994). Peterson discloses an inner ring member and an outer ring member defining a raceway space therebetween. A roller disposed in the raceway space includes a concave radial race surface interposed between axially spaced radial race surfaces. The outer ring member includes a single outer race surface engaging both of the axially spaced radial race surfaces of the roller.

Claim 22 is being amended to include the limitation of an outer ring member encircling said inner ring member and defining a raceway space therebetween, said outer ring member including a lubrication groove formed in said outer ring member between at least two axially spaced outer race surfaces. Peterson does not disclose or suggest an outer ring member including a lubrication groove formed in said outer ring member between at least two axially spaced outer race surfaces, as required in amended claim 22. The outer ring member outer race surface disclosed in Peterson is a single surface 15a having no grooves formed therein. Accordingly, withdrawal of the rejection of the claim 22 under 35 U.S.C. §102(b) for being anticipated by Peterson is respectfully requested.

In the Office Action, claim 22 was rejected under 35 U.S.C. §102(b) as being anticipated by Ai (U.S. Pat. No. 6,354,745). Ai discloses an inner ring member and an outer ring member defining a raceway space therebetween. A roller disposed in the raceway space includes a cylindrical radial race surface interposed between axially spaced radial race

surfaces. The outer ring member includes a single concave outer race surface engaging both of the axially spaced radial race surfaces of the roller.

As discussed above, claim 22 is being amended to include the limitation of an outer ring member encircling said inner ring member and defining a raceway space therebetween, said outer ring member including a lubrication groove formed in said outer ring member between at least two axially spaced outer race surfaces. As in Peterson, Ai does not disclose or suggest an outer ring member including a lubrication groove formed in said outer ring member between at least two axially spaced outer race surfaces, as required in amended claim 22. The outer ring member outer race surface disclosed in Ai is a single surface 16 having no grooves formed therein. Accordingly, withdrawal of the rejection of the claim 22 under 35 U.S.C. §102(b) for being anticipated by Ai is respectfully requested.

In the Office Action, claims 1-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in view of Diedrich (U.S. Pat. No. 5,080,502). Diedrich discloses an outer bearing member having two axially spaced outer race surfaces. As in Peterson, Diedrich fails to disclose or suggest a lubrication groove formed in the outer ring member between at least two axially spaced outer race surfaces. Therefore, Diedrich fails to satisfy the deficiencies of Peterson.

As in claim 22, claims 1 and 12 are being amended to include the limitation of an outer ring member encircling said inner ring member and defining a raceway space therebetween, said outer ring member including a lubrication groove formed in said outer ring member between at least two axially spaced outer race surfaces. As discussed above, the combination of Peterson and Dietrich fail to teach this limitation. Claims 2-11 and 13-21 depend from one of claims 1 and 12, which along with claim 22 are believed allowable. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §103(a) for being unpatentable over Peterson in view of Diedrich is respectfully requested.

In the Office Action, claims 1-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ai in view of Diedrich. As in Ai, Diedrich fails to disclose or suggest a lubrication groove formed in the outer ring member between at least two axially spaced outer race surfaces. Therefore, Diedrich fails to satisfy the deficiencies of Ai.

Claims 1, 12, and 22 are being amended to include the limitation of an outer ring

member encircling said inner ring member and defining a raceway space therebetween, said outer ring member including a lubrication groove formed in said outer ring member between at least two axially spaced outer race surfaces. As discussed above, the combination of Ai and Dietrich fail to teach this limitation. Claims 2-11 and 13-21 depend from one of claims 1 and 12, which along with claim 22 are believed allowable. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §103(a) for being unpatentable over Ai in view of Diedrich is respectfully requested.

In the Office Action, claim 22 was rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in view of Acampora, Jr. (U.S. Pat. No. 5,839,834). The Office Action asserts that one skilled in the art would have utilized the groove upon the non-bearing contact area as taught by Acampora, Jr. within Peterson so as to increase the lubrication capacity about the bearings as well as to provide a reservoir of lubrication for the assembly, as suggested by Acampora, Jr. in claim 1.

As discussed above, Peterson does not disclose or suggest a groove formed in the outer ring member. Acampora, Jr. teaches a groove 16 formed proximal an axial end 18 of an outer ring member 12 between an outer race surface and the outer ring axial end surface in order to receive resilient springs extending radially outwardly from a metal ring. Claim 1 of Acampora, Jr. discloses that the groove 16 serves as a lubrication reservoir. Nothing in Acampora, Jr., however, discloses or suggests forming the groove between at least two axially spaced outer race surface. Moreover, forming the groove between at least two axially spaced outer race surface would prevent receiving the resilient springs extending radially outwardly from a metal ring contrary to the teaching of Acampora, Jr.

Accordingly, one skilled in the art might form a groove in the outer ring of Peterson, as taught by Acampora, Jr., between an outer race surface and the end of the outer ring. However, absent hindsight reconstruction, none of the cited references disclose or suggest forming the groove between at least two axially spaced outer race surface, as claimed in amended claim 22 of the present application. Accordingly, Applicant respectfully asserts that the combination of Peterson and Acampora, Jr. does not result in the invention claimed in amended claim 22. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §103(a) for being unpatentable over Peterson in view of Acampora, Jr. is respectfully

requested.

In the Office Action, claim 22 was rejected under 35 U.S.C. §103(a) as being unpatentable over Ai in view of Acampora, Jr. As in Peterson, Ai does not disclose or suggest a groove formed in the outer ring member. As discussed above, Acampora, Jr. teaches a groove 16 which can serve as a lubrication reservoir. However, nothing in Acampora, Jr. discloses or suggests forming the groove between at least two axially spaced outer race surface, as required in amended claim 22. Therefore, Acampora, Jr. does not satisfy the deficiency in Ai, and Applicant respectfully asserts that the combination of Ai and Acampora, Jr. does not result in the invention claimed in amended claim 22. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §103(a) for being unpatentable over Ai in view of Acampora, Jr. is respectfully requested.

In the Office Action, claims 1-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in view of Acampora, Jr., as applied to claim 22, further in view of Diedrich. As discussed above, neither Peterson, Acampora, Jr., nor Diedrich disclose or suggest a lubrication groove formed in the outer ring member between at least two axially spaced outer race surfaces, as claimed in amended claims 1, 12, and 22. Claims 2-11 and 13-21 depend from one of claims 1 and 12, which along with claim 22 are believed allowable. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §103(a) for being unpatentable over Peterson in view of Acampora, Jr., and Diedrich is respectfully requested.

In the Office Action, claims 1-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ai in view of Acampora, Jr., as applied to claim 22, further in view of Diedrich. As discussed above, neither Ai, Acampora, Jr., nor Diedrich disclose or suggest a lubrication groove formed in the outer ring member between at least two axially spaced outer race surfaces, as claimed in amended claims 1, 12, and 22. Claims 2-11 and 13-21 depend from one of claims 1 and 12, which along with claim 22 are believed allowable. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §103(a) for being unpatentable over Ai in view of Acampora, Jr., and Diedrich is respectfully requested.

Finally, claims 1, 12, and 22 are being amended to delete the limitation requiring the inner race surface be convex. As a result, a bearing assembly including an inner race surface having any shape can fall within the scope of the claims.

In view of the above remarks and amendment to claims 1, 12, and 22, Applicant respectfully requests reconsideration and allowance of claims 1-22. No additional fees for filing this response are believed to be due. However, if such fees are due, including any fees for an extension of time to respond, the Commissioner is hereby authorized to charge them to deposit account no. 17-0055.

Respectfully submitted,



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